The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings.

■ **The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.**

⚠ DANGER	Failure to follow the instructions will result in death or serious injury.
⚠ WARNING	Failure to follow the instructions could result in death or serious injury.
⚠ CAUTION	Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.

Be sure to observe the following in order to avoid burns or other injury from fluid leakages, overheating, fire or explosions.

⚠ DANGER	
Do not get the charger wet or use it while it is wet, and do not touch or hold it with wet hands.	If this is not observed, problems with operation or electric shocks may occur.
Do not cover the charger with a cloth or similar while it is in use.	If this is not observed, heat may build up and the case may become deformed, or fire or overheating may occur.
Do not disassemble or modify the charger.	If this is not observed, electric shocks or injury may occur.
Use the charger at the specified power supply voltage only.	If a power supply voltage other than that specified is used, fire, explosions, smoke, overheating, electric shocks or burns may occur.
⚠ WARNING	
Be sure to hold the power cable by the power plug when connecting and disconnecting the power plug from the electrical outlet.	If you do not hold the power cable by the power plug, fire or electric shocks may occur. * If heat or acrid-smelling smoke is coming out from the power plug * There may be a bad connection inside the power plug.
Do not touch metallic parts of the charger or the AC adapter if there is a lighting storm.	If lightning strikes, electric shocks may occur.
Do not overload the electrical outlet with appliances beyond its rated capacity, and use only a 100 – 240 V AC electrical outlet.	If the electrical outlet is overloaded by connecting too many appliances using adapters, overheating resulting in fire may occur.
Do not damage the power cord or power plug. (Do not damage, process, forcibly bend, twist or pull them, bring them near hot objects, place heavy objects on them or bundle them tightly together.)	If they are used while damaged, fire, electric shocks or short-circuits may occur.
Do not use the charger with commercially-available electrical transformers designed for overseas use, as they may damage the charger.	
Always be sure to insert the power plug as far as it will go.	If this is not observed, fire may occur.
⚠ CAUTION	
Disconnect the power plug from the electrical outlet before cleaning the charger.	

Technical Service Instructions **SI-7DG0A-002**

SM-BCR1

00

Battery Charger

■ **Main specifications**

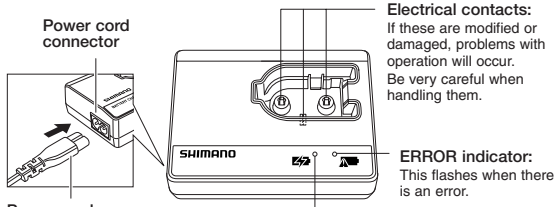
Input	100 -- 240 V AC, 50/60 Hz
Output	8.4 V DC, 0.55 A
Dimensions	Approx. 100 mm (W) x 30 mm (H) x 72 mm (D)
Weight	Approx. 110 g
Operating temperature	0° – 45°C
Storage temperature	-20° – 70°C

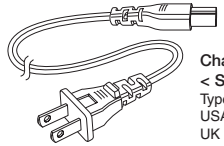
Names of parts

■ **Charger (SM-BCR1)**

This charger is a special charger for use in charging Shimano lithium ion batteries (SM-BTR1). Never insert any other type of batteries, otherwise bursting or fire may occur.

* Make sure that you thoroughly understand the general Safety Information for this product before use.

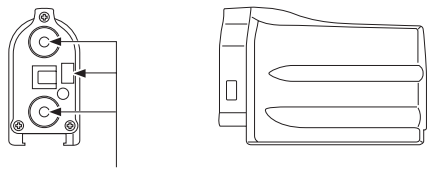

Power cord connector
Electrical contacts:
If these are modified or damaged, problems with operation will occur.
Be very careful when handling them.
ERROR indicator:
This flashes when there is an error.
Power cord:
Insert into the connector.
* Insert as far as it will go.
CHARGE indicator:
This illuminates while charging is in progress.



Charger cord
< Sold separately >
Type No.
USA/Canada : SM-BCC1 2
UK : SM-BCC1 6

■ **Special battery (SM-BTR1)**

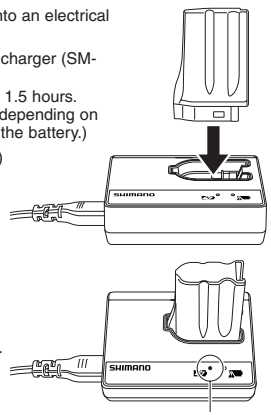
This is a lithium ion battery. Use the special charger (SM-BCR1) to charge it. Never use any other charger to charge the battery, otherwise bursting or fire may occur.



Electrical contacts:
If these are modified or damaged, problems with operation will occur.
Be very careful when handling them.

Charging method

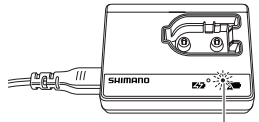
1. Insert the power plug of the charger into an electrical outlet.
2. Insert the battery (SM-BTR1) into the charger (SM-BCR1) as far as it will go.
   * The charging time is approximately 1.5 hours. (Note that the actual time will vary depending on the amount of charge remaining in the battery.)
3. When the CHARGE indicator (orange) switches off, charging is complete.
   * If the ERROR indicator flashes, it means that there may be a problem with the battery. Refer to "Error Judgment Details" for more information.
4. Disconnect the power plug of the charger from the electrical outlet and store the charger in a suitable place as specified in the Safety Precautions.



Error Judgment Details

What to do if an error occurs

- Remove the battery from the charger, disconnect the power plug of the charger from the electrical outlet, and then repeat the charging operation.
- If charging is still not possible after the above steps have been carried out, the ambient temperature may be too low or too high, or there may be a problem with the battery.



If charging is not possible, the ERROR indicator on the charger will flash.

INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS
- SAVE THESE INSTRUCTIONS.

DANGER
- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet, if needed.
This power unit is intended to be correctly orientated in a vertical or floor mount position.

Battery to be recharged for this product is follows
Brand Name : SHIMANO
Battery Type : SM-BTR1
Rating : DC7.4V 500mAh

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Representative plug of power supply cord of countries around the world.

A Type (American Type) | B Type (British Type) | BF Type (British Type) | B3 Type (British Type) | C Type (CEE Type) | SE Type (CEE Type) | O Type (Ocean Type)

Attention: Power cord meeting demands from each country shall be used.

-For only the United States
Use a UL Listed, 1.8-3m (6-10ft), Type SPT-2 or NISPT-2, AWG no.18 power supply cord, rated for 125V minimum 1A, with a non-polarized NEMA 1-15P plug rated for 125V 10A."

The representative supply voltage and plug type are described in this chart.
Depend on an area, Different type of plug and supply voltage are used.

Europe

Countries	Voltage	Frequency (Hz)	Plug type
Austria	230	50	C
Belgium	230	50	C
Czech	220	50	C
Denmark	230	50	C
Finland	230	50	C
France	230	50	C
Germany	230	50	C
Greece	220	50	C
Hungary	220	50	C
Iceland	230	50	C
Ireland	230	50	C/BF
Italy	220	50	C
Luxemburg	230	50	C
Netherlands	230	50	C
Norway	230	50	C
Poland	220	50	C
Portugal	230	50	C
Romania	220	50	C
Russia	220	50	C
Slovak	220	50	C
Spain	127/230	50	C
Sweden	230	50	C
Switzerland	230	50	C
UK	240	50	BF

Asia

Countries / Regions	Voltage	Frequency (Hz)	Plug type
China	220	50	A
Hong Kong	200/220	50	BF
India	230/240	50	C
Indonesia	127/200	50	C
Japan	100	50/60	A
Korea(rep)	220	60	C
Malaysia	240	50	BF
Philippines	220/230	60	A/C
Singapore	230	50	BF
Taiwan	110	60	A
Thailand	220	50	C/BF
Vietnam	220	50	A/C

Oceania

Countries	Voltage	Frequency (Hz)	Plug Type
Australia	240	50	O
New Zealand	230/240	50	O

North America

Countries	Voltage	Frequency (Hz)	Plug type
Canada	120	60	A
USA	120	60	A

Central America

Countries	Voltage	Frequency (Hz)	Plug type
Bahamas	120/240	60	A
Costa Rica	110	60	A
Cuba	110/220	60	A/C
Dominican(rep)	110	60	A
El Salvador	110	60	A
Guatemala	120	60	A
Honduras	110	60	A
Jamaica	110	50	A
Mexico	120/127	60	A
Nicaragua	120/240	60	A
Panama	110/220	60	A

South America

Countries	Voltage	Frequency (Hz)	Plug type
Argentina	220	50	C/BF/O
Brazil	127/220	60	A/C
Chile	220	50	C
Colombia	120	60	A
Peru	220	60	A/C
Venezuela	120	60	A

Middle East

Countries	Voltage	Frequency (Hz)	Plug type
Iran	220	50	C/BF
Iraq	220	50	C/BF
Israel	230	50	C
Saudi Arabia	127/220	50	A/C/BF
Turkey	220	50	C
UAE	240	50	C/BF

Africa

Countries	Voltage	Frequency (Hz)	Plug type
Algeria	127/220	50	C
Congo(dem)	220	50	C
Egypt	220	50	C
Ethiopia	220	50	C
Kenya	240	50	C/BF
Nigeria	230	50	C/BF
South Africa	220/230	50	C/BF
Tanzania	230	50	C/BF
Tunisia	220	50	C

Disposal information for countries outside the European Union

This symbol is only valid within the European Union.
Contact the place of purchase or your nearest Shimano agent for advice on disposing of used batteries.

SHIMANO

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Please note: specifications are subject to change for improvement without notice. (English)
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Concerning export this battery to Korea, please contact Shimano.This battery (SM-BCR1) is not applicable for Malaysia.

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